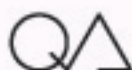


Vendor-to-Vendor Education to Improve
Malaria Treatment in the Private Sector:
A "How-To" Manual for District Managers

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TEL (301) 654-8338
FAX (301) 941-8427
www.qaproject.org



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Vendor-to-Vendor Education to Improve Malaria Treatment in the Private Sector: A "How To" Manual for District Managers

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Purpose of this Manual

This manual was developed to assist district health management teams in countries where malaria is endemic to improve the quality of malaria treatment given by private clinics, pharmacies, shops and kiosks. It gives step-by-step instructions for how to implement a public health activity that will involve wholesalers in communicating malaria guidelines to retailers and private clinics.

Typically, district health management teams have focused on improving the quality of care offered by government hospitals, health centers and dispensaries. However, because these days 60-80% of people with malaria—or parents of children with malaria—first visit a private establishment to get treatment, it has become more and more important for district health teams to give attention also to the private sector. The Vendor-to-Vendor education activity is a low-cost approach for developing an effective public-private partnership to ensure that people receive prompt and effective treatment for malaria.

This manual was conceived and written by Paula Tavrow and Jennifer Shabahang from the Quality Assurance Project. Graphic layout and production were carried out by James Chika and Waverly Rennie.



Most caretakers first seek malaria treatment and advice from the private sector.

The manual is based on activities carried out by members of the Bungoma District Health Management Team in Kenya, particularly Sammy Makama, Terry Wefwafwa, Tom Kangere, Richard Wanyonyi and Joachim Mwanza who also contributed to development of this manual. These activities were facilitated by Hezron Ngugi and Muthoni Kariuki of the African Medical Research and Education Foundation (AMREF).

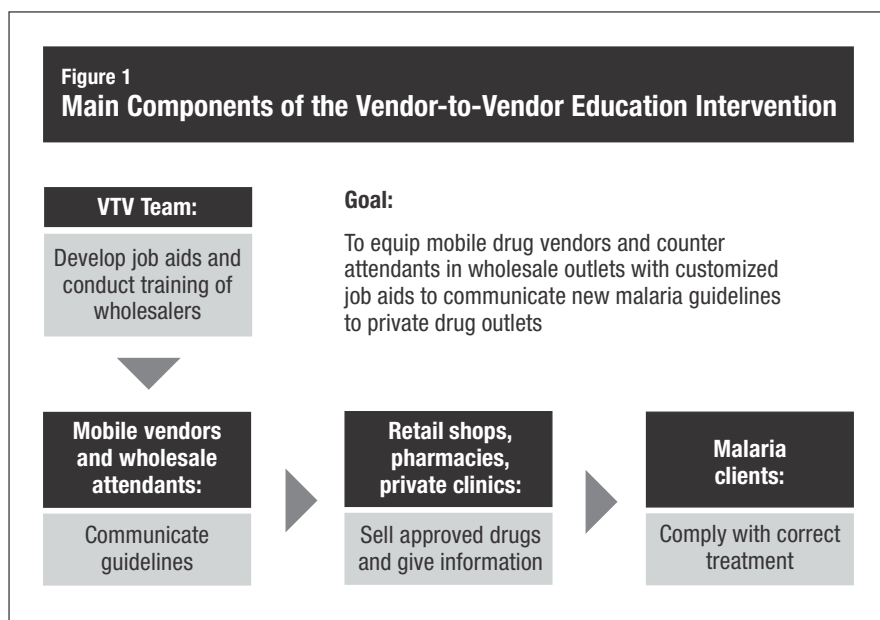
What is Vendor-to-Vendor?

Vendor-to-vendor (VTV) education is a district-led intervention to improve private retail drug outlets' compliance with malaria treatment guidelines. The intervention trains wholesale vendors—mobile vendors or counter attendants in wholesale outlets—to communicate guidelines to retail drug outlets in a district. Retail drug outlets include shops, kiosks, private clinics, and retail pharmacies. Guidelines are communicated to these outlets using two job aids (posters). One job aid is for the outlet attendant or shopkeeper to refer to when selling anti-malarial drugs, and the other is to inform clients about the recommended drugs.

Vendor-to-vendor was pilot-tested in Bungoma district, Kenya, in early 2000. Six months later, the activity was evaluated using mystery shoppers. It was found that mystery shoppers were nine times more likely to get effective anti-malarial drug treatment in the correct dosage from outlets that had received the job aids, as compared to those that had not been reached by the program. The local costs of the program after six months were about US\$17 per outlet reached, or US\$0.10 per beneficiary (defined as a person with malaria who was properly treated due to the intervention). The VTV activity reached about 500 retail outlets in the first six months.

VTV relies on district-level wholesalers, equipped with customized job aids for retailers, to serve as communicators of malaria treatment guidelines to retail drug vendors or outlets (see Figure 1). Wholesalers are either mobile vendors or counter attendants at wholesale pharmacies and general shops. Mobile vendors usually purchase drugs from general shops in urban areas, and then visit rural areas by motorcycle to resell the drugs to rural shops and kiosks. Counter attendants, who are stationary, are employees of urban or large rural pharmacies and general shops. (In Bungoma district, which has nearly one million inhabitants, there were about 90 mobile vendors and about 100 counter attendants.)

The communication of the treatment guidelines occurs during the normal business interaction. For wholesale counter attendants, they are to communicate the guidelines and give the job aids to retailers when they come to the wholesale pharmacy or general shop to buy anti-malarial drugs. For mobile vendors, the interaction occurs at the retail shop, pharmacy or clinic, since the mobile vendors travel to these outlets.



Main Steps for Conducting Vendor-to-Vendor

1. **Choose a VTV team** of about 5 members to oversee and implement the activity. The team should largely be drawn from the District Health Management Team.
2. **Conduct an inventory** of all anti-malarial wholesalers in the area. This will include wholesale pharmacies, wholesale shops that sell anti-malarials and other merchandise, and mobile vendors who sell drugs by motorbike.
3. **Conduct formative research** (focus group discussions and individual interviews) with malaria clients, retail outlets, and wholesalers to determine the main information that needs to be conveyed and challenging situations that retailers face.
4. **Develop two job aids** (posters) in a language commonly understood in the district. One job aid is intended for the shopkeeper and should include a dosage chart and treatment advice. The other job aid is intended for clients and should promote effective treatment in an eye-catching way.
5. **Develop agreement forms** that retail outlets will be asked to sign upon receipt of the job aids from counter attendants or mobile vendors. By signing the agreement, the shopkeeper agrees to follow the guidelines. These forms also serve as receipts to track distribution of job aids.
6. **Hold a three-hour orientation** on malaria guidelines and the VTV intervention for wholesale owners. To involve the counter attendants, owners need to agree to send their attendants for training and let them distribute the job aids during the course of their work.
7. **Conduct one-day training sessions** for mobile vendors and counter attendants. The topics covered should include: general information on malaria, the government's policy on treatment;

inter-personal communication skills, and practice sessions on conveying the job aids. At the end, participants receive job aids and agreement forms for distribution.

8. **Monitor the progress** of the VTV activity through visits to wholesalers and interactions with mobile vendors. During these visits, the team checks their malaria knowledge with a quiz and collects agreement forms. Additionally the team could engage in **mystery shopkeeping** at wholesale pharmacies and general shops to see how they are distributing job aids to shopkeepers.



A mobile vendor explains job aid to retailer while selling malaria drugs

9. **Evaluate using mystery shoppers** after about six months. The mystery shoppers will pose as clients at retail outlets and private clinics. They will claim to have a sick child at home. Some mystery shoppers should ask for a non-recommended drug. They should have sufficient funds to purchase whatever drug(s) the outlets suggest that they buy for their child.
10. **Give awards** to the wholesale outlets and mobile vendors who distributed the most job aids, as well as to the private retailers who performed the best.

1. Choosing a Vendor-to-Vendor Team

For a district interested in launching Vendor-to-Vendor, the first step is to appoint a team of about five members to oversee and implement the activity. This group will be referred to as the VTV team. At least two members of the team should be from the District Health Management Team, so that they can negotiate for access to transport and other supplies that may be needed. It is recommended that the team be led by someone who has public health outreach experience. At least one member of the team should have a clinical background to address malaria treatment issues. A pharmacist is also valuable for discussing drug-related issues. Finally, the team should have a computer-literate member who can enter data on the wholesalers into the computer.



The VTV team plans activities

The ideal VTV team has:

- A public health outreach specialist, such as public health officer or medical social worker
- A clinician who treats malaria
- A pharmacist who knows anti-malarial drugs
- Someone who can enter data into a computer

All team members must be able to carry out Vendor-to-Vendor activities as part of their normal workload. Members should be willing to meet regularly at the district health headquarters for meetings. They should also be willing to walk around the urban and peri-urban areas of the district and meet with wholesalers.



Meeting with wholesale pharmacy owners and pharmaceutical company representatives



VTV team member meets with wholesale pharmacy attendant

2. Inventory of Wholesalers

2.1 Which information to collect

Because VTV relies on wholesalers as the communicators of the malaria guidelines, it is important to have information on all of the wholesalers who live in the district or serve the district. Generally there will be two types of wholesalers: (1) Static – wholesale pharmacies and wholesale general shops that sell anti-malarials and other over-the-counter medicines; and (2) Mobile – independent drug vendors who usually move around on motorcycles and sell anti-malarials to retail outlets. The best way to organize information on the wholesalers is to create a database or spreadsheet (see Tables 1 and 2).

For static wholesalers, the following information should be gathered:

- 1) Date – when the information was obtained.
- 2) Name of the wholesale outlet – either pharmacy or general shop
- 3) Location – where the outlet can be found (a street address, or proximity to a known landmark, e.g., “opposite ABC school”)
- 4) Township – name of the town where outlet is situated
- 5) Name of the owner
- 6) Number of attendants – total number of counter attendants that work at the outlet
- 7) Sell approved drugs – whether outlet is currently selling the recommended anti-malarial drugs

Other desirable information to collect from the static wholesalers is:

- Postal address, if any
- Phone number, if any

- Main sources of drugs
- Main anti-malarial drugs sold
- Average daily number of customers

Note: The VTV team should feel free to add any further information to the database if they feel it would assist them in planning for training of wholesale counter attendants. However, they should be careful not to turn the inventory into a major data collection exercise.

For mobile wholesalers, the following information should be collected:

- 1) Date – when the information was obtained
- 2) Name of the mobile wholesaler
- 3) Contact address, if any
- 4) Number of retail outlets served – Estimated number of retail outlets and private clinics to which the mobile wholesaler sells anti-malarial drugs
- 5) Where purchase stocks – Where the mobile wholesaler purchases the drugs that he then sells to retail outlets. As mobile vendors are constantly moving around, the best way to contact them in the future may be through this establishment. (For instance, in Bungoma district the VTV team found that most mobile vendors got their supplies from one wholesaler, “Pema Shop”. To inform the mobile vendors of the planned training course, the team left the invitation letters at Pema’s and they were distributed to the mobile vendors when they came in to purchase stocks.)
- 6) Whether sell approved drugs – whether the vendor is currently selling the recommended anti-malarial drugs

Table 1
Sample Spreadsheet for Static Wholesalers

Date	Name of Wholesale Outlet	Location	Township	Name of owner	Number of attendants	Sell approved drugs?
21/9/01	Kwanza Pharmacy	Next to Post Office	Bungoma	Sarah Musaba	3	Yes
23/9/01	Papa General Shop	At junction with M1 & Bungoma road	Webuye	Joseph Okwenda	5	No

Table 2
Sample Spreadsheet for Mobile Wholesalers

Date	Name	Contact address, if any	Estimated number of retail outlets served	Where purchase stocks	Sell approved drugs?
15/9/01	George Okelo	Box 111, Bungoma	30	Ruth's General Store	No
20/9/01	Jane Wakungu	Box 555, Webuye	10	Pema Shop	Yes

2.2 How to collect the information

Two or three team members should be assigned to conduct the inventory; one or two for the static wholesalers and one for the mobile wholesalers.

For the static wholesalers, the best way to get the information is to walk or bicycle through all towns in the district and enter all pharmacies and general stores. Use the following dialogue when entering the pharmacy or general store:

- Introduce: “Hello. I am a member of the District Health Management Team. I am working on a project to improve malaria treatment in the district and I would like to ask you a few questions. ”
- Ask: “Do you sell anti-malarials wholesale (in boxes)?”
 - ◆ **If no**, say, “Thank you, right now I am trying to identify wholesalers. From whom do you buy your drugs?” (This will help to identify the wholesalers.)
 - ◆ **If yes**, ask for the information found on the static wholesaler spreadsheet and record it neatly.

For the mobile wholesalers the situation is different. They are difficult to track down as they are usually out selling to retail shops.

- First, approach any mobile vendor (person on a motorcycle) that you see around town and ask him or her where s/he purchases stocks of anti-malarial drugs. Be sure that you explain to that you are simply gathering information and are not intending to prosecute anyone, so they do not feel threatened. If the person is a drug vendor, enter his or her information on the mobile wholesalers’ spreadsheet.

- Next, go to that establishment and ask if they serve many mobile wholesalers. If they do, spend several days there getting the information from the mobile vendors as they come in.
 - ◆ Ask mobile vendors if they know of any other places where other mobile vendors get their stocks. If so, go there and follow the same procedure.
- After spending time at establishments where mobile vendors get their drug stocks, and trying to record as many vendors as possible, an inventory sheet can be left for the mobile vendors to fill in when they come to purchase their stocks. Make sure to leave the sheet with someone responsible at the wholesale outlets who agrees to record the mobile vendors. Explain to this person why you want the information so the mobile vendors do not feel threatened. Return to these outlets every week to record the information collected.

2.3 How to store the information

If the team has access to a computer, the information should be entered on an Excel or SPSS spreadsheet. If not, a hand-written inventory can suffice. The advantage of the computer spreadsheet is that one can sort the data by a particular category, can enter in to the database any training scores, can easily update it, and can print copies for all team members.

Once the data is collected and printed, the VTV team should examine it for any inconsistencies, duplications, etc. The inventories should then be corrected so that the district has an up-to-date version. Every year, the district should spend several days updating the inventory.

3. Conducting Formative Research

After carrying out the inventory, the VTV team conducts formative research with malaria clients, private drug outlets and wholesalers. The purpose of the formative research is to gain an understanding of the prevailing malaria treatment knowledge and beliefs of customers and retailers, as well as the problems faced by drug sellers (wholesale and retail). This information will assist the team in the design of both the job aids and the training of the wholesalers.

When collecting this information, the team should not try to educate others on correct treatment practices. Rather, at this stage, the VTV team should be “listeners” and observers only. It is important that the team learn about all the misperceptions and concerns that the public and drug outlets have about anti-malarial drugs and treatment. The team should also learn about issues that may inhibit customers from using the recommended anti-malarials and why retailers may not sell them.



A focus group participant

The following formative research should be conducted:

1. **In-depth interviews of retailers (shopkeepers) and wholesalers.** These are structured interviews where a team member asks specific questions to a shopkeeper. A questionnaire is developed by the team and members are encouraged to probe more deeply during the interviews. About 15-20 retail drug outlets in both urban and rural areas should be interviewed, and about 10 wholesalers. (A sample interview form is in **Appendix A**, page 21.)
2. **Focus group discussions (FGD) with malaria clients.** These are informal discussions with caretakers of young children. A discussion guide with open-ended questions (not yes-or-no questions) is developed by the team. One team member leads the discussion by asking the questions and another team member should take notes of the responses. Several members of the group should answer the question so that all opinions are voiced. Some information the team should learn from the FGD is: what caretakers do when a child is ill with fever, what drug(s) they think are most effective for malaria, how they feel about receiving advice from a shopkeeper, if they understand that there is a difference among drugs, etc. (A sample focus group discussion guide is in **Appendix B**, page 23.)

Guidelines for Focus Group Discussions

- 8-12 clients per FGD
- 3 FGDs: 1 urban, 2 rural
- Clients' age: 20-50
- Mix of male and female clients
- Follow a FGD guide
- One VTV team member should take careful notes, trying to capture clients' terminology

3. **Mystery shopper visits.** Members of the VTV team, who did not participate in the inventory, should visit 15 retail and 5 wholesale establishments. They should pretend to be parents with a sick child at home (2-years-old). They should ask for something to treat malaria. They need to have enough money with them to buy the recommended drug(s). After leaving the outlet, they should note down the following:

- ◆ what drugs and in what quantities they were sold, if any
- ◆ what information or advice they were given, if any.

Based on the responses, the VTV team should calculate the number of answers given to each of the questions from the interviews. They should also compile a list of the drugs sold, the quantities, and what information was given. They should then make a list of the misperceptions and concerns of clients and shopkeepers. They should try to organize the list with the most common misperceptions and misinformation at the top.



A mystery shopper on her way to a retail shop



Some of the drugs purchased by the mystery shoppers

Based on the information collected, the VTV members will know what common misperceptions and problems need to be addressed in the job aids and the training. They will also be able to identify knowledge gaps that need to be filled.

Some issues that may be discovered through the formative research are:

- Retailers and clients do not know the recommended anti-malarial drugs
- Clients do not know that some drugs are not recommended
- Retailers do not know the proper dose of the recommended anti-malarial
- Retailers sell incomplete doses of anti-malarial drugs
- Retailers sell drugs that are not recommended
- Retailers do not tell clients the full dose
- Retailers do not write down the full dose

4. Job Aids

The next step is for the VTV team to develop job aids (posters) to communicate the malaria guidelines and messages regarding correct treatment. First the team should decide what messages the job aids will contain, based on the formative research. Then the team should work with an artist to design the job aids' layout and illustrations. The job aids are pre-tested several times with the target population. Both job aids should be produced in a language understood by all customers and retailers in the district. (In Kenya, the job aids were produced in Kiswahili, not English. See **Appendices C and D**, pages 25-27.)

It is recommended that the VTV team produce two types of job aids.

1. The **shopkeeper job aid** is for the shopkeeper or retail drug outlet attendant to consult when selling anti-malarial drugs. It is to be hung prominently in the shop so that the shopkeeper can easily use it when serving clients. The job aid should probably contain:
 - ◆ symptoms of malaria
 - ◆ a dosage chart of the approved anti-malarials
 - ◆ treatment advice to give to customers
 - ◆ common situations faced by shopkeepers and suggestions on how to deal with them
2. The **client job aid** is to be placed at the drug outlet to communicate to clients that anti-malarials are available there. The job aid reminds people to treat malaria properly and depicts the approved anti-malarials in their actual packaging.

4.1 Components of the Shopkeeper Job Aid

The shopkeeper job aid is to be used by the retailer or private clinician when dispensing anti-malarials. It should probably contain the following components:

- *Symptoms of malaria.* List and show an illustration of the main symptoms of malaria. The retailer should ask the client if the main symptom—fever—is present to ensure that the client or his/her child has malaria.
- *Dosage chart for the recommended anti-malarials.* The dosage charts should be shown for recommended treatment for all relevant age groups. This chart needs to be large enough so that it can be seen from a distance. If sulfadoxine-pyremethamine (SP) is recommended, appropriate accompanying anti-pyretics should also be listed.
- *Any important advice that the retailer should give the client.* The job aid should remind the retailer to give the client specific information about the malaria treatment, such as the need to go to a health center or hospital if the client does not get better. The VTV team will need to determine which are the most important messages based on the formative research.
- *Situations that the retailer might encounter and advice on how to handle them.* Illustrations and descriptions should explain situations where a retailer may experience difficulties in following the malaria treatment guidelines. Advice is given on what the shopkeeper should do. For example if the client asks for another anti-malarial, the shopkeeper should tell the client which is the recommended anti-malarial and explain why it is the best.

4.2 Components of the Client Job Aid

The purpose of the client job aid is to announce to the public which are the approved anti-malarial drugs and where they can be purchased. It is particularly important to emphasize that these drugs are appropriate for children under one. The client job aid will be placed outside retail shops and pharmacies, or at the counter where clients can see it easily. One of its purposes to let clients know that effective anti-malarial drugs are available there.

There are three main components to the client job aid are:

- *Title phrase.* This should be a catchy slogan to grab the readers' attention. "*Tibu malaria sawa sawa*", "Treat malaria effectively" was used in the Bungoma client job aid. This phrase was then also used on caps and T-shirts which were given to the wholesale attendants and mobile vendors.

-
- *Where effective anti-malarials can be bought.*
There should be an illustration of a retailer dispensing the correct anti-malarials and text to demonstrate that shopkeepers are selling the drugs and are capable of giving advice.
 - *The approved anti-malarials in their actual packaging.* In Kenya, anti-malarials underwent quality control tests in November 1999. When the job aids were produced in March 2000, only five brands of SP were approved for treating malaria. The client job aid shows these five brands of SP in their actual packaging so that the client can easily identify them. If no specific brands have been approved by the government, then the job aid should promote the particular type of drug, such as SP. The most popular brands of the drug could be shown on the job aid as examples.

4.3 Pre-testing the Job Aids

Once the team has determined the messages that will be conveyed on the job aids, they should work with a graphic artist to produce a draft that contains the text and illustrations. Next, the draft job aids need to be pre-tested with the target population.

Pre-testing the Shopkeeper Job Aid

- The shopkeeper job aid should be pre-tested with 4-5 shopkeepers.
- Ask them to read each section of the job aid and then ask them to explain in their own words what they understand.
- Ask them what they think each illustration means.
- Ask if they cannot understand any part of it.
- Ask them if they disagree with any part of it.
- A team member should take notes of the feedback given by the shopkeepers.

Pre-testing the Client Job Aid

- The client job aid should be pre-tested with 8-10 caretakers of small children (female and male). This can be done at a health facility or marketplace.

- Ask them to read and explain the job aid. This can be done in small groups in order to avoid embarrassing anyone who is not literate.
- Ask them what they think each illustration means.
- Ask them if they cannot understand any part of it.
- A team member should take notes of the feedback given by the clients.

After pre-testing the graphic artist should revise the job aids. The revised job aids should then be pre-tested once more: the shopkeeper job aid with 2-3 shopkeepers, and the client job aid with 4-6 clients. After the second round of pre-testing, the job aids should be finalized.

4.4 Producing the Job Aids

In producing the job aids, the team should:

- Decide how many job aids will be printed. This should be based on the estimated number of retail drug outlets in the district. Remember to add extra for wholesale owners and others from the DHMT who will want copies. (For Bungoma district, which has nearly 1 million people, the VTV team decided to produce 1500 of each type of job aid.)
- Avoid using ALL CAPITAL LETTERS, except for titles.
- Obtain price quotes from several printers for paper that will not tear easily.
- The shopkeeper job aid will probably need to be larger than the client job aid since it contains more information.
- The shopkeeper job aid should be hole-punched so that it can be hung easily inside the shop.

5. Agreement Forms

When counter attendants and mobile vendors distribute job aids and communicate malaria guidelines to drug retailers they will also ask the retailer to sign an agreement form. The purpose of the agreement is twofold:

- For the retailers to agree to follow the malaria guidelines
- To track which retailers received job aids

The agreement booklets should be made in triplicate, with:

one page for the counter attendant or mobile vendor,

one page for the retailer, and

one page for the DHMT that will be collecting the agreements.

Each agreement form should have a simple statement printed on it, such as:

“I acknowledge that I received today a job aid and information on the new malaria treatment guidelines, which I will do my best to follow.” This statement should be written in the same language as the job aids. Below this statement should be space to print the name of the retailer, the name of the outlet, the sublocation of the outlet, the date, and the signature of the retailer. There should also be space for the signature of the mobile vendor or counter attendant. Each agreement form should have a different number, for ease of later tracking.

The counter attendant or mobile vendor should do the following after educating the retailer on the job aids:

- Show retailer how to fill out the agreement form, ensuring that it is legible.
- Ask the retailer to sign his or her name.
- Write the serial number from the agreement form on the shopkeeper job aid.
- Sign the form themselves.
- Give one copy to the retailer and keep the other two copies.

The mobile vendor should either return the completed forms to the supplier or to the District Health Office. The VTV team will collect forms from the wholesale outlets during monitoring visits.

Whenever a job aid is issued (be it for the first time, or as a replacement), a new agreement form should be filled out.



A wholesale counter attendant explains job aid to retailer

6. Orientation of Wholesale Owners

An orientation meeting should be held for the owners of static wholesale outlets: both wholesale pharmacies and wholesale general shops or supermarkets. The meeting has several purposes: 1) to explain the VTV intervention to the owners and obtain their cooperation; 2) to convince the owners that their counter attendants should participate in communicating the malaria guidelines; and 3) to have owners sign up their counter attendants for a one-day training session.

The meeting should be no more than three hours long and should be scheduled late in the day or on a weekend, because owners generally do not like to leave their establishments during operating hours. One orientation should be held in each major urban area of the district. Team members should ask a few wholesalers which is the best time for a meeting. To get higher attendance, the VTV team may wish to ask a local Rotary or Lions' Club chapter or the equivalent to assist in inviting wholesale owners to come to the orientation meeting. One of these organizations might even be willing to host the gathering and/or to provide refreshments.



Orientation meeting with wholesale owners



Counter attendant at wholesale pharmacy

The following topics should be covered during the orientation meeting:

- Description of the Vendor-to-Vendor intervention
- Why the owners' support is necessary
- Responsibilities of the counter attendants

A sample hand-out that can be given to wholesale owners is found in **Appendix E**, page 28. The owners should also receive one copy of each job aid.

Note: Because of the importance of achieving cooperation from all the wholesale owners, the VTV team should visit all owners who missed the orientation sessions in order to give out the hand-out and sign up counter attendants for the training.

7. Training the Mobile Vendors and Counter Attendants

One-day sessions should be held to train the counter attendants and mobile vendors in the malaria guidelines and how to communicate them to retailers. Because their jobs differ, separate training sessions should be held for counter attendants and mobile vendors. There should be no more than 20 participants per session. All team members should act as facilitators during the training

The team will need to develop a training curriculum and the following documents:

- Facilitator's Manual – a guide for the facilitator's to use during the training session (see **Appendix F**, page 30)
- Participant's Handout – main points of the training so that participants do not need to take notes (see **Appendix G**, page 36)
- Checklists for counter attendants and mobile vendors (see **Appendices H and I**, pages 39-40)
- Quiz for the participants (see **Appendix J**, page 41).

The documents in the appendices are those used in Bungoma district. They can be used as examples and should be tailored by the VTV team to fit the specific situation in the district.

The following main components should be included in the training curriculum:

1. Introduction and Climate Setting

- ◆ Participants and facilitators introduce themselves.
- ◆ Explain objectives of the day.

2. Explanation of Vendor-to-Vendor

- ◆ Explain that through this activity counter attendants and mobile vendors will educate drug retailers on correct malaria treatment.
- ◆ Discuss why the private sector is involved
- ◆ Explain the responsibilities of counter attendants and mobile vendors
- ◆ Discuss why they should participate in Vendor-to-Vendor

3. General Information on Malaria

- ◆ Give information on malaria worldwide, in country and in district

- ◆ Explain what causes malaria
- ◆ Discuss signs and symptoms of malaria, both uncomplicated and severe

4. Malaria Treatment Guidelines

- ◆ Explain the recommended treatment for malaria
- ◆ Present approved anti-malarials

5. Presentation of Job Aids

- ◆ Explain and discuss Job Aids

6. Inter-Personal Communication Skills

- ◆ Discuss how to effectively communicate with the retailers

7. Agreement Forms

- ◆ Explain purpose of agreement forms
- ◆ Practice filling out agreement forms

8. Practice with Job Aid

- ◆ Participants study Job Aids, and clarify any issues with it
- ◆ Practice educating using Job Aid
- ◆ If possible, mock encounter with real shopkeeper (VTV team should organize to have 4-5 actual shopkeepers come for that session)

9. Administer Malaria Quiz

- ◆ Give ten-question quiz and have participants score each other.
- ◆ Make sure all understand which answers are correct and why.

10. Discussion and Questions

- ◆ Inform participants that awards will be made after the activity is evaluated using mystery shoppers.

11. Distribution of Materials

- ◆ Participants receive job aids and agreement forms
- ◆ Participants also receives certificates of attendance, caps and/or T-shirts

After the one-day training, counter attendants and mobile vendors will be ready to begin distributing job aids and educating retailers on the malaria treatment guidelines.

8. Monitoring

About 2-3 months after training, VTV team members should make monitoring visits to all of the trained counter attendants and mobile vendors. The purpose of the visit is to: (1) check malaria knowledge using a ten-question quiz, (2) collect agreement forms, (3) answer any questions that the wholesalers might have, and (4) supply the wholesaler with more job aids or agreement booklets, if necessary.

1. Quiz

A ten-question true or false quiz should be administered to the trained wholesalers. Appendix J is the quiz used in Bungoma district. The quiz should contain questions on topics that were covered during the training. The team member should do the following:

- ◆ Read the questions aloud to the wholesaler
- ◆ Circle the answer given
- ◆ Correct the quiz
- ◆ Show the wholesaler which question(s) he or she answered incorrectly and explain the correct answer

2. Agreement forms

- ◆ Ask to see the agreement forms that the wholesaler has collected
- ◆ Take the “Office” copy from each pair of agreement forms

3. Questions

- ◆ Ask the wholesaler if he or she has any questions or has encountered any problems while educating retailers on the malaria guidelines.
- ◆ If the wholesaler has distributed only a few or no job aids, ask why and discuss how he or she can improve.

4. Supplies

- ◆ If the wholesaler has less than five of each job aid, give them 10 more (depending on availability)

Monitoring the counter attendants is straightforward, as the VTV team member visits them at their place of employment. It is also advisable for the VTV member to discuss the activity briefly with the wholesale owner as well, if he or she is available. This is particularly important if it does not appear that the attendant(s) have been distributing the job aids. The owner may need to be reminded of the importance of this activity.



VTV team member resupplies mobile vendor with job aids

Monitoring of the mobile vendors may be more difficult. A VTV team member may need to spend a couple of days at the mobile vendors' distributor before encountering most of those who were trained.

A VTV team may wish to monitor how counter attendants actually communicate malaria guidelines to retailers. One approach they can use is “mystery shopkeeping.” A DHMT member not known to the counter attendants poses as a shopkeeper needing to buy anti-malarial drugs for his store. The member should visit about five wholesale pharmacies or general shops. Afterwards, he or she should meet with the other VTV team members to discuss what happened. Corrective action with the wholesale owners may need to be taken.

9. Evaluate with Mystery Shoppers

About six months after training, the team will conduct data collection using mystery shoppers to determine which retail outlets have received the job aids and how well they follow the malaria guidelines. Mystery shoppers (also called simulated clients) are regular people who pose as customers seeking anti-malarial drugs. Mystery shoppers are very useful as data collectors as the retailer does not know that he or she is being observed and will act normally.

Data collection should be conducted for about 2 weeks. Data collectors are divided into four teams of two mystery shoppers and one supervisor. Each team visits about eight to ten drug outlets per day. It is best if outlets are randomly selected, so that the district can estimate coverage of the activity. A recommended approach is that the district randomly choose a certain number of sublocations, and then all outlets in the sublocation are visited.

Mystery shoppers

Mystery shoppers should be recruited by members of the DHMT. Requirements for mystery shoppers include:

- Ability to read, write, and speak English;
- Availability for all days of data collection;
- Willingness to pretend to be a parent of a sick child;
- Of parental age (between 18 and 45).

Ten candidate mystery shoppers participate in a two-day training. The training should include:

- Introduction to the Vendor-to-Vendor project;
- Introduction to and practice of mystery shopper scenarios (see below);
- Introduction to the data collection tools;
- Practice using the tools, both in classroom and in the field; and
- Standardization among data collectors.

The eight most qualified candidates will be invited to participate in the data collection exercise.

Scenarios

The scenarios describe how the mystery shopper will act when he or she enters a drug outlet. The team should prepare two scenarios, depending on what issues are important. In Bungoma district, the team was interested in knowing if retailers sold SP to small children, and whether they would sell someone an ineffective drug (chloroquine-based) if it were requested.

For the first scenario, shoppers posed as mothers with a nine-month old child sick at home. They told the shopkeeper that they thought the child had malaria and they asked the shopkeeper what they should buy for the child. For the second scenario, shoppers posed as fathers with a two-year old child sick at home. They told the shopkeepers that they wanted to buy Malarquin (a popular brand of CQ). This was the only information that the mystery shoppers gave the shopkeepers without prompting. They had standardized answers to other questions that the shopkeeper might ask, such as: the child's age, how long the child

Scenario 1:

You are a parent with a sick child at home. You tell the shopkeeper that you think the child has malaria. You ask the shopkeeper what you should buy for the child.

How to answer questions the shopkeeper might ask:

Child's age – 9 months

Child's gender – male

Child's weight – 8 kg

Where you live – Nearby village or town

Have you taken child to a health center for this illness – no

Has child gotten a blood slide for this illness? – no

How long has the child been sick? – since yesterday

Symptoms – fever, chills

Has child ever had a reaction to medicine? – no

Is child breastfeeding? – yes

Has child taken anti-malarial within last 3 weeks? – no

Do you want to purchase a full dose? – yes

Do you have child's health card? – no

Do you have any drugs at home? – no

If shopkeeper gives you a choice of drugs, say you want what they think is best

has been sick or the child's symptoms. The complete mystery shopper scenarios from Bungoma district are shown. Since the evaluation included some rural areas, the mystery shoppers also each invented a reason to be at that drug outlet if someone suspected them of not being from that area.

What Mystery Shoppers Do When They Enter a Shop or Clinic:

- Say that the child at home is sick with malaria or ask for particular drug, depending on scenario
- Do not offer any other information
- If the shopkeeper asks any other questions, answer them according to the scenario
- Purchase the drug recommended
- Exit shop
- Once out of sight of the shopkeeper and not in too public of an area, complete Mystery Shopper Recording Form

Scenario 2:

You are a parent with a sick child at home. You tell the shopkeeper that you want to buy Malaraquin. If the shopkeeper tries to sell you SP, you say you do not have enough money, but in the end you find the money to buy what is recommended.

How to answer questions the shopkeeper might ask:

Child's age – 2 years

Child's gender – male

Child's weight – 15 kg

Where you live —Nearby village or town

Have you taken child to a health center for this illness? – no

Has child gotten a blood slide for this illness? – no

How long has the child been sick? – since yesterday

Symptoms – fever, chills

Has child ever had a reaction to medicine? – no

Is child breastfeeding? – yes

Has child taken anti-malarial within last 3 weeks? – no

Do you want to purchase a full dose? – yes

Do you have child's health card? – no

Do you have any drugs at home? – no

Note: To avoid raising suspicion, mystery shoppers should not to walk together or speak to each other. They should also be careful not to be seen getting in or out of vehicles together.

Supplies for Mystery Shoppers:

- Mystery Shopper Recording Form (see **Appendix K**, page 42, for an example used in Bungoma district) – each mystery shopper should take at least 15 copies each day of data collection
- Money to purchase drugs – depending on the price of anti-malarials, but about US\$5.00 a day per mystery shopper
- Pencils, eraser, pencil sharpener

Supervisors

Supervisors are used to gather information from the retail outlets after the mystery shoppers have made their visits. Unlike the mystery shoppers who pose as actual clients, the supervisors identify themselves as MOH employees and ask the outlet attendant questions from the Supervisor Recording Form (see **Appendix L**, page 44, for an example used in Bungoma district). There should be one supervisor for each pair of mystery shoppers. The supervisors can be the VTV team members themselves or other employees of the MOH. The supervisors participate in the same two-day training as the mystery shoppers.

Responsibilities of the Supervisor:

- Determine which outlets the team visits.
- Record names and locations of all outlets visited
- Interview outlet attendant, using Supervisor Recording Form
- Review Mystery Shopper Recording Form to make sure they are filled out properly and legibly.
- Match the 2 Mystery Shopper Recording Forms with the 1 Supervisor Recording Form for each drug outlet.

What Supervisor Does When Visiting Outlets:

- The supervisor enters the drug outlet only after **both** mystery shoppers have visited

- The supervisor identifies him/herself as a member of the DHMT and states that he/she wants to ask a few questions about malaria treatment.
- The supervisor asks the questions on the Supervisor Recording Form and fills in the answers.

Supplies for Supervisors:

- Pencils, eraser, pencil sharpener, blue pen
- At least 15 copies of the Supervisor Recording Form each day

Logistics

- 1-2 vehicles will be needed to transport teams to the data collection sites. Teams in urban areas can move on foot or by local transport.
- It may be helpful to have a Public Health Technician from the area assist the team to locate outlets.
- At the end of each day of data collection, all drugs purchased by the mystery shoppers should be given to the study team leaders and the money surrendered. New money should be allocated each day, for ease of accounting. The team should decide what to do with the efficacious drugs. (One suggestion is to donate them to the district hospital.) Inefficacious drugs should be destroyed.



VTV member with some of the drugs from the mystery shopping

Data Analysis

After the data has been collected, the team should tabulate how well the different types of outlets performed in the various areas, such as:

- What drugs were dispensed
- What dosages were dispensed
- What advice was given
- What drugs are being stocked
- How useful were the job aids

Examples of tables and graphs that can be developed are shown below and at right. All of these are based on data from Bungoma district.

Figure 2
Reported usefulness of job aids

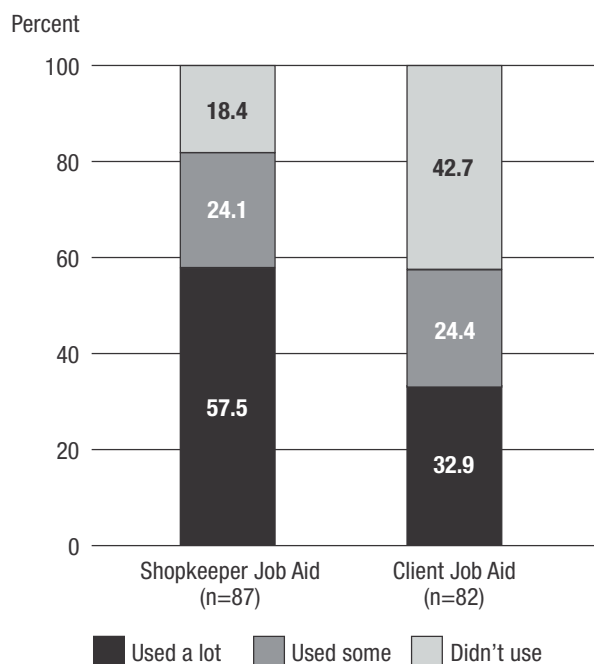


Table 3
Percent of outlets with anti-malarial drug types in stock

	Type of outlet			
	Shop/Kiosk (N=187)	Pharmacy/ Chemist (N=46)	Private clinic (N=19)	Total (N=252)
SP-based	21.4	93.5	73.7	38.9
AQ-based	78.1	93.5	73.7	80.6
CQ-based	34.8	67.4	36.8	40.9

Notes: SP=sulfadoxine-pyrimethamine (first-line drug); AQ=amodiaquine (second-line drug); CQ=chloroquine (to be sold by prescription only); N=number of outlets.

Table 4
Anti-malarial drug types sold to mystery shoppers, doses told, whether sold with anti-pyretic, and whether sold as a syrup (in percent)

	Shop or kiosk (N=374)	Small pharmacy (N=92)	Private clinic (N=38)	Wholesale pharmacy or shop (N=30)
Drugs sold to shoppers				
SP-based	13.1	23.9	7.9	50.0
AQ-based	31.6	54.3	31.6	46.7
CQ-based	13.9	16.3	21.1	3.3
Other anti-malarial	0.3	0.0	5.3	0.0
Not an anti-malarial	6.4	2.2	0.0	0.0
Not sold anything	34.8	3.3	34.2	0.0
Overall*				
Told correct dose	20.5	41.6	12.0	66.7
Wrote correct dose	2.9	21.3	8.0	50.0
Sold with anti-pyretic	32.0	67.4	76.0	63.3
Sold as a syrup (bottle)	1.2	61.8	56.0	63.3

Notes: SP=sulfadoxine-pyrimethamine (first-line drug); AQ=amodiaquine (second-line drug); CQ=chloroquine (to be sold by prescription only); N=number of mystery shopper visits (2 per outlet).

*Of shoppers who purchased SP, AQ or CQ.

10. Presentation of Results and Awards

After conducting the evaluation, the VTV team should make a presentation in the district of the findings. The presentation should also be an opportunity to brainstorm about how the intervention should be improved in order to make further strides. Ideally, representatives from the wholesale owners, mobile vendors, and retail outlets should attend the presentation.



Presentation of award to exemplary retail shop owner

Because malaria treatment guidelines change often and new anti-malarial drugs come onto the market, it is advisable to conduct a VTV exercise annually or bi-annually. The suggestions that arise from the participants in a dissemination meeting can be used to improve the VTV activity in the future.

At the close of the presentation, it is recommended that the VTV team give awards. The awards provide recognition of the outstanding performers and give encouragement to others. Awards should be given for the most outstanding communicators of job aids among the wholesale attendants and mobile vendors. These can be based on the number of agreements (receipts) collected from the wholesalers, the number of outlets visited by shoppers which were displaying job aids, or the performance of the retail outlets visiting by mystery shoppers.

Awards should also be given to the exemplar retail outlets. These are outlets that sold mystery shopper efficacious drugs in the right quantities and also gave them accurate and complete information

Awards can be as inexpensive as a certificate of excellence. Samples of efficacious drugs, wall clocks, or informational materials can also be given.

Conclusions

Vendor-to-vendor education is a low-cost intervention that any district in a malaria endemic area can implement. It creates a unique public-private partnership to improve malaria treatment practices in a district. The activity has been proven to work successfully in a rural district of Kenya.

Activities to support VTV can occur at the community and national level. At the community level, efforts to increase consumer demand for effective anti-malarial drugs would be a highly useful complementary activity. In Bungoma district in 2002, the district is implementing a “neighbor-to-neighbor” education activity that assists and motivates neighbors in villages to educate each other on correct malaria treatment.

At the national level, the Ministry of Health and Pharmaceutical Board can support the activity by stepping up efforts to ensure that inefficacious anti-malarial drugs do not reach the districts, that drug packaging is correct and legible, and that prices are regulated.

Vendor-to-vendor activities can also be introduced to improve compliance with other treatment guidelines, such as for acute respiratory illnesses or diarrhoeal diseases. However, districts should be careful not to overload the vendors with information. It is probably



A mobile vendor helps improve retail prescribing practices with a job aid

wisest to focus on one set of treatment guidelines per training session.

Districts should feel free to make any adaptations in the VTV approach, training curriculum, or tools to fit their particular needs and budgets. Ideally, the activity would be repeated annually or bi-annually in order to reinforce continually the nation’s malaria treatment guidelines.

Siku tatu baadaye

Nafuna, matozo wako mionchangarifu sana! Amepasa?

Ndiko, alikuwa aliveli kuhusu madawa za SP. Hata utakuwa wa madawa alinieleza kwanza SP ni bora.

Ndiko SP mshauri! Wakati mmoja ana joto mpyaka kwani madawa za SP kama kinywaji malaria.

USHAURI WA NANDAKO

Hahani, Nandako. Mitozo wangu ana joto mpyaka. Nafuna ana malaria. Namko kwa duka la dawa kumema dawa ya maji.

Pole sana, Nafuna. Nafuna matozo wangu pia ana malaria. Lakini ninamema dawa ya SP kama Odozor, Fansidar au Falcidin. Vile Wima ya Afya inavyopendelewa kama kinywaji hiki. Ungatama SP pia.

Sina hukia. Namko kumema mshauri anayopendelewa nini. Nitamema baadaye.

WAAMBIE MAJIRANI WAKO

1. Ulika dawa za SP kama Odozor, Fansidar, na Falcidin.
2. Tiba kamili ya malaria.
3. Salama kwa wote (hata kwa watoto wachanga).
4. Bei nafuu kwa maana inameza mara moja tu.
5. Inavizwa na Ponadol.

Watoto waweze kufa haraka pasipo matibabu kamili. Maumivu yakiziki, muone daktari mara moja.

(SP ni wakulawala-gy-matibabu-na)

Part of the consumer education materials used in neighbor-to-neighbor activity

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APPENDIX A

Vendor-to-Vendor Formative Research

Sample Interview Guide for Retail Outlets

Greetings. I am here today to ask you a few questions about malaria in the community. I hope that you can spare a few minutes to answer these questions.

1. Who are you? (to respondent)

Owner of shop

Relative of owner

Employee of owner

Other _____

2. Do you sell any medicine here? Yes No
(if no, stop here and go to another outlet)

3. What medicines are you currently selling for malaria?

Name of drug	Price per tab	Dosage you recommend	
		Child (Under one year)	Adult

4. About how many people bought anti-malarial drugs from here yesterday (or the last day you were open)? _____

5. What anti-malarial do you sell the most often? _____

6. What do you think are the main signs or symptoms of malaria? (tick all mentioned)

- fever/chills
- stomach ache
- headache
- loss of appetite
- joint pains
- body weakness
- vomiting
- diarrhea

Other: _____

-
7. Which anti-malarial drug or combination of drugs do you think is the best for children under age one?

Why?

8. Which anti-malarial drug or combination of drugs do you think is the best for adults?

Why?

9. Are there any drugs now commonly sold for malaria that you don't think are very effective?

Yes

No

If yes, which ones?

10. [If SP is NOT mentioned]: Have you ever stocked fansidar or metakelfin?

Yes

No

If yes, why are you not stocking them now?

If no, would you be willing to stock them? Why or why not?

11. When a client asks for a drug that you do not think is very effective, what do you do?

12. If a client does not want to buy a complete dose, what do you do?

13. If a mother comes to you and says that she has a very sick child at home, and asks for advice, what do you do?

14. What problems to you face when selling anti-malarial medicines? Please explain.

15. If we were to produce information for you on malaria treatment, what language would you prefer it to be in?

Thank you for your time.

APPENDIX B

Vendor-to-Vendor Formative Research

Sample Focus Group Discussion Guide for Malaria Clients

1. Where did you first go for treatment the last time you or your child had malaria? Why?
2. For private outlets: Did you tell the attendant or shopkeeper what you wanted, or did he or she recommend something to you? Which drug?
3. Did you tell the attendant how much you wanted, or did he/she recommend a certain amount?
4. Were you given any other advice? If so, what?
5. How much did you pay for the treatment the last time?
6. Have you ever gotten credit if you do not have money?

-
7. What do you think is a reasonable price for a full dose of anti-malarials for an adult? For a child?
 8. Which drugs do you think are most effective for treating malaria in adults? In children? Why?
 9. Are there any drugs that you have purchased in the past to treat malaria that you though were not very effective? If yes, which ones?
 10. Do any anti-malarials give side effects for children under one? If yes, please describe.
 11. Do you think that injections are better than tablets for treating malaria? Why or why not?
 12. For children, do you think syrups are better than tablets? If so why?
 13. Do you have any other comments about malaria treatment?


Thank you for your participation.

APPENDIX C

Shopkeeper Job Aid (translation follows)

DAWA ZA MALARIA ZINAZOPENDEKEZWA

DALILI ZA MALARIA:




- Joto mwiliini
- Khatibi (kwa vidoto)
- Kiambo na kichwa
- Msumu ya viungo

Hivi ndivyo vipimo kamili vya tibe ya malaria kumezwa mara moja:

UMRI	SP: Fansidar, Falcidin, Ordoar ama Laridax	Na	Panadol ama Elymal Dawinol, Coamol
Miezi 2-11		(1/2) na	
Miaka 1-4		(1) na	
Miaka 5-8		(1 1/2) na	
Miaka 9-14		(2) na	
Miaka zaidi ya 15		(3) na	

Joto mwilini likiendelea, tumia Panadol kwa kipimo hicho kila baada ya masaa sita kwa siku tatu.




SP inafaa hata kwa watoto wachanga

MASHAURI KUHUSU TIBA MPYA YA MALARIA

- Madawa ya SP yanapendekezwa kama tibe ya kwanza ya malaria.
- Madawa ya tembe za SP ni bora na bei nafuu kuliko madawa aina ya maji.
- Mgonjwa astitudie kutumia madawa ya SP hadi baada ya wiki tatu.

Mtaji akitoa aina ya dawa ambazo hazipendekezwi (kama dawapate, molaripate na kowapate)...




Shauri:

Pendekeza aina ya SP (Fansidar, Falcidin, Ordoar ama Laridax) na Panadol kwa sababu:

1. Inafaa zaidi
2. Siyo dhanga
3. Inapendekeza mara moja to
4. Ni bora kwa dhareana


Mtaji akitoa aina ya dawa mgonjwa nyanzani na anataka dawa



Shauri:

- Utilize kama mtoto ana joto mwilini, kwa hivyo...
- Utilize umri wa mtoto.
- Angalia vipimo vya madawa hapa juu.
- Muuzie na musikize vipimo kawia.


Kama mtaji hana gao to kutisha kuanzia kipimo kandi cha madawa hayo...



Shauri:

1. Kikwazikana, wakopokea kipimo kandi.
2. Kikwazikana, mshauri mtaji angakaze mtoto kwa kicho cho afya.
3. Kama mtaji unazoa kipimo kicho kandi.

Mtaji akitoa mtoto hujapata nafuu ana ni mgonjwa sana...



Shauri:

Eneo mtaji angakaze mtoto kwa kicho cho afya mara moja.

AMREF

As of March 2008, these anti-malarial drugs passed quality control standards in Kenya.

Agreement serial number

USAID

QA

[Title] **RECOMMENDED ANTI-MALARIAL DRUGS**

[Upper left box with mother and child]

Symptoms of malaria:

- **Body fever**
- Vomiting (especially children)
- Headache
- Joint aches

[Upper right box with dosage chart]

Here are the most effective treatments of malaria that should be taken one time:

AGE	SP: Fansidar, Falcidin, Orodar or Laridox	And	Panadol or Elymol, Dawamol, Cosmol
2-11 months	(½)	and	(1/4)
1-4 years	(1)	and	(½)
5-8 years	(1 ½)	and	(½)
9-14 years	(2)	and	(1)
More than 14 years	(3)	and	(2)

If the fever continues, use Panadol in these dosages every 6 hours for 3 days.

[Caption under sleeping infant] SP is effective even for very young children

[Middle: Sentences under dosage chart]

ADVICE REGARDING THE NEW TREATMENT OF MALARIA

1. SP drugs are recommended for the first treatment of malaria.
2. SP drugs as tablets are the best and a better value than any syrup.
3. A sick person should not use these drugs again for 3 weeks.

[Lower left box of shopkeeper showing drugs]

If a customer comes and asks for drugs that are no longer recommended (like dawaquin, malarquin or homaquin)...

Advice: Recommend an SP drug (Fansidar, Falcidin, Orodar or Laridox) and Panadol because:

1. It works better.
2. It is not bitter.
3. One needs to take it only once.
4. It is a better value.

[Bottom left box of customer giving shopkeeper money]

If a customer does not have enough money to buy a full dose...

Advice: 1. If possible, extend credit to the customer.

2. If this is not possible, advise the customer to get the full dose from a health center.
3. Never sell the customer an underdose of the drug.

[Lower right box of shopkeeper pointing to dosage chart]

If a customer says that she has a sick child at home and wants a drug...

Advice: • Ask if the child has fever. If yes:

- Ask the age of the child.
- Look at the treatment schedule shown above.
- Sell and explain to her the correct dose of the drug.

[Bottom right box of shopkeeper directing mother to hospital]

If a customer says that the child is not getting better or is very sick...

Advice: Tell the customer that she should take the child immediately to a health facility.

[Note at bottom]

As of March 2000, these anti-malarial drugs passed quality control standards in Kenya. Agreement serial number_____.

[Logos at bottom]

AMREF, Ministry of Health/Bungoma District Health Management Team, USAID, Quality Assurance Project

APPENDIX D

Client Job Aid (translation follows)



[Title] **TREAT MALARIA CORRECTLY!**

[Subtitle] Your store can advise you.

[Picture of woman purchasing Fansidar from a shopkeeper for her sick children.]

[Text below picture] Use one of these drugs, even for a very young child:

[Pictures of Fansidar, Falcidin, Orodar, Metakelfin and Laridox]

[Curved text] If the sick person does not get better, see a doctor.

[Note at bottom] As of March 2000, these anti-malarial drugs passed quality assurance standards in Kenya.

[Logos at bottom]

AMREF, Ministry of Health/Bungoma District Health Management Team, USAID, Quality Assurance Project.

APPENDIX E

Sample Guide for Orientation Session with Wholesale Owners

Note: This session should be led by the VTV team.

Purpose

It is important that shopkeepers and private practitioners know the current malaria treatment guidelines so that the residents of the District receive effective treatment for malaria. Whenever customers buy anti-malarial drugs at a shop, pharmacy, or clinic, they should receive an effective treatment that is not expired. They should also purchase the correct dosage (whether for a child or for an adult) and receive correct instructions on how to take the drug and what to do if the sick person does not get better.

Strategy: Vendor to Vendor

The District Health Management Team is seeking to create a partnership with you, the wholesale sellers of drugs. Because you interact daily with retailers such as shopkeepers, chemists and private doctors, we wish to enlist your cooperation in communicating the malaria guidelines to them. There are too many shops and private clinics in this district for health workers to reach them all and it would be difficult to bring them all together for a training. Instead, we hope that when a shopkeeper or private practitioner comes to buy drugs at a wholesale pharmacy or supermarket, they will receive a brief orientation in the malaria treatment guidelines. (We will also ask for the cooperation of mobile vendors who sell to shops.)

We have created a job aid to help shopkeepers and private practitioners dispense anti-malarial drugs. Shopkeepers and pharmacists should place the job aid where they can use it when they sell drugs. We have also printed a poster to inform clients of the recommended treatment and that shops are now able to sell it.

Why we need your support

As the owners of wholesale pharmacies and shops, we need your help to make this activity successful. We need you to support this activity in the following ways:

1. Allow your attendant(s) to participate in a one-day training session, to be held on a work day. The attendants will learn how to use the job aid to communicate the malaria guidelines to shopkeepers and private practitioners.
2. When a shopkeeper or other private practitioner comes in to buy drugs for malaria, allow your attendant to orient them on the new malaria guidelines. This may mean that other attendants need to serve the customers while one attendant is giving the orientation.

Why you should support this activity:

- You will be supplying shops and chemists with the most effective malaria drug.
- By selling the most effective drug you will get positive feedback and you will have a good reputation in the community.

-
- Retailers will respect you for giving them information that assists them to sell drugs.
 - You will help the community to fight malaria.
 - **You will be saving lives**, especially of babies and children under 5 years.

Responsibilities of attendants:

The following is what we expect of your attendants after they attend the one-day training:

1. When a shopkeeper comes in to buy malaria drugs, explain which drugs the government now recommends as the most effective treatment for malaria.
2. Explain to the shopkeeper or other private practitioner that these drugs can now be sold without a prescription at any shop, not just pharmacies or chemists. Show proof if necessary.
3. Give the shopkeeper or other private practitioner a job aid, explain how to use each section and tell them to hang it in the shop where they can easily use it when someone wants to buy a malaria drug. (*Note: if they have already received a job aid from someone else, do not give them another one.*)
4. Ask the shopkeeper or other private practitioner to explain the job aid back to you so that you know that he or she has understood it.
5. Give these key messages:
 - SP is not too strong for young children
 - Panadol should always be given with SP, even if the child is not feverish
 - If you treat malaria right the first time you will save money later
6. Tell the shopkeeper or private practitioner to hang the job aid where he can easily see it when serving clients.
7. Give the shopkeeper a poster to hang at the shop where clients can see it.
8. Ask the shopkeeper or other private practitioner to sign an agreement saying that they have received the job aid and will follow the new guidelines. Sign the agreement yourself. Give one copy to the shopkeeper or other private practitioner; keep the other copy. Once you have 15 receipts, please submit them to the District Health Officer.
9. When the shopkeeper or private practitioner returns, ask them if they have any questions about the malaria treatment guidelines or about the job aid.

Do you have any questions or comments? [Encourage discussion.]

We also want you to know that the wholesale outlet which educates the most shopkeepers and private doctors will receive an award from the District Health Office.

Thank you for your participation in this important activity.

APPENDIX F

Vendor-to-Vendor One-Day Training of Counter Attendants and Mobile Vendors Facilitators' Manual

“Treat Malaria Correctly”

8:30-9:00 Introduction and Climate Setting (30 mins.)

Welcome

Introductions

Objectives of the day:

- Understand new malaria treatment guidelines
- To be able to communicate new guidelines to shopkeepers

Training will consist of presentations, discussion, role plays and a quiz

9:00-10:00 Explanation of Activity (60 mins.)

Objective: Understand the Vendor-to-Vendor Activity and what their role is

- Community members, rather than going to a health clinic, often buy drugs for treating malaria at local shops or pharmacies. When a person buys a drug for malaria at a shop or pharmacy we want to make sure that they receive an effective drug, the correct dosage and correct instructions on how to take the drug.
- The DHMT has designed a programme to have drug wholesalers educate drug retailers on malaria treatment guidelines

Here is how you can help us to accomplish our goals:

1. Pay close attention to this training. We will be giving you the latest information on malaria treatment.
2. Educate shopkeepers about what you learned today.
3. Give shopkeepers the job aids so they can refer to them if they have questions
4. Make sure that you understand the guidelines.

Notes to facilitators:

Put up flipchart of “Objectives”

- Review with participants
- Let them ask questions

What is vendor to vendor?

You (an attendant or mobile vendor) supply drugs to shops, kiosks, chemists and private doctors. When you next sell them drugs you will also educate them about the information you learned here today. The activity is called vendor to vendor because wholesale vendors educate retail vendors.

Why involve the private sector?

We would like to form a partnership with you, counter attendants and mobile vendors, because you already interact daily with shopkeepers, private doctors and rural chemists. You have an established relationship with them. There are so many shops in this district that it would be very difficult for health workers to reach them all.

Notes to facilitators:

- Put up flip chart with graphic of activity (see Fig. 1 in this manual).
- Ask participants to refer to checklist in folder.
- Read checklist out loud with group

Refer to checklist (at end of Facilitator's Manual) for attendants or mobile vendors depending on audience

Why you should participate in this activity

- You will be supplying shops and chemists with the most effective malaria drug.
- By selling the most effective drug you will get positive feedback and you will have a good reputation in the community.
- The continued selling of an ineffective drug could hurt your reputation.
- You will assist the community to fight malaria.
- **You will help save lives**, especially of babies and children under 5 years.

Notes to facilitators:

- Put up blank flipchart
- Ask them to state why they should participate, put on flipchart, discuss
- Add any not mentioned

10:00-11:00 General Information on Malaria (60 mins.)

Objective: Learn basic information on malaria (extent of disease, causes, symptoms)

Status of Malaria Worldwide and in Sub-Saharan Africa

- Each year there are more than 300 million cases of malaria worldwide
- Malaria kills more than 1 million people each year worldwide
- 3,000 people die from malaria each day worldwide
- Malaria is responsible for one out of every four childhood deaths in Africa
- Children often die of malaria within 48 hours of the first symptom
- The economic costs of malaria are estimated at US\$2 billion a year, or about [use local currency]

Notes to facilitators:

- Ask participants if they know how many people die from malaria, how many get malaria, etc.
- Put up flipchart and read statistics out loud.

Status of Malaria Here [example: Kenya and Bungoma District]

Malaria occurs in most parts of Kenya (except at some very high altitude areas), but it varies from region to region. In the lake region (including Bungoma District) and coastal areas, malaria is transmitted year round. Malaria is one of the most serious public health problems in Kenya.

- About 26,000 Kenyan children die each year from malaria. This is equal to an average of 72 children per day.
- Malaria causes disability among adults which significantly affects the nation's economy.

In Bungoma district, malaria is a very serious problem

- Nearly half of the people admitted to the hospital have malaria.
- 1 in 3 people who die in hospitals die from malaria.

What is Malaria?

Malaria is a disease caused by the blood parasite *plasmodium*. The disease is transmitted when an anopheles mosquito carrying malaria parasites bites a person.

Signs and Symptoms of Malaria

The harmful effects of malaria are mostly seen in babies, young children and pregnant women. Malaria can vary from mild to severe disease. Most people with malaria have the following signs and symptoms:

- Fever or a history of fever lasting a few days
- Headache
- Body and joint pains
- Feeling cold and sometimes shivering
- Loss of appetite
- Sometimes – stomach pains, diarrhea, nausea and vomiting

The following are signs and symptoms of **severe or serious malaria**:

- Fever or history of fever and any or all of the following:
- Unconsciousness
- Had convulsions or fits (with this fever)
- Fast or difficult breathing
- Pale hands, tongue and inner part of the eyelids
- Generalized body weakness
- Dehydration

Exercise

- Ask participants to make a list of the signs and symptoms of malaria
- Write responses on flipchart
- Cross out any that are not symptoms of malaria – explain that it is not
- Add any that are missing

Ask if they know symptoms of severe malaria – add them, or circle them on list

Any person with severe malaria should go to a health center immediately.

11:00-11:15 Tea Break (15 mins.)

11:15-11:45 New National Malaria Guidelines (30 mins.)

Objective: understand current malaria guidelines and know names of approved drugs

[Example: Kenya]

In 1998, the Ministry of Health adopted new guidelines for the treatment of malaria, due to resistance to chloroquine (about 85% of malaria cases in Bungoma were found to be resistant, which means that the drug had become ineffective.) These new guidelines changed the recommended first-line drug for malaria from chloroquine (CQ) to SP (sulfadoxine-pyrimethamine or sulfalene-pyrimethamine).

Among the SP drugs now being sold, only **Fansidar, Metakelfin, Laridox, Orodar and Falcidin** passed quality control tests in Nairobi in October 1999. Therefore, these are the only drugs that are approved by the Ministry of Health.

Discussion:

What are the main anti-malarial drugs sold in this district? At pharmacies? At shops?

Which drugs are best? Why? How can retailers be convinced to stock approved drugs?

Remember:

- SP is now available without prescription and can be sold in shops
- A benefit of SP is that it is one dose; this is easier for people to remember, and it means that it is less likely that they will buy an underdose.

11:45-12:45 Explanation of Job Aids (60 mins.)

Objective: To understand the content and use of the two job aids

A job aid is a tool to help someone do his or her job correctly.

The shopkeeper job aid contains the correct malaria treatment dosages as well as advice on what to do in situations when it might be difficult to follow the guidelines. It should be used by shopkeepers, private practitioners and attendants who are dispensing drugs to customers

Notes to facilitators: Hand out the job aids to all participants. Read through the job aids item by item with the group. After each section, stop and check their understanding.

The client job aid is to make people aware that shopkeepers can sell and advise them on correct malaria treatment.

12:45- 1:00 Agreements (receipts) (15 mins.)

You will ask each shopkeeper or private practitioner that you educate on the job aids to sign the front of the posters, as well as a special agreement form (receipt) saying that they will follow the new guidelines. You will sign it also. They will be left with one copy and we will collect the other copy, or you can turn them in to the District Health Office.

1:00-2:00 Lunch (60 mins.)

2:00-2:15 Interpersonal Communication Skills (15 mins.)

The following are some tips for effective communication when you orient the shopkeeper or private practitioner to the job aid:

- Use words that the shopkeeper will understand
- Emphasize the importance of using SP as first-line drug, even for young children
- Make eye contact
- Allow the shopkeeper to ask questions

-
- Ask the shopkeeper to repeat main concepts
 - Be friendly and helpful

In the next section, you each will practice communicating these job aids to retailers. We will be observing you and telling you which interpersonal communication skills you need to strengthen.

2:15-3:45 Practice with Job Aid (20 mins.)

For most of the afternoon we will work in small groups to practice how to educate shopkeepers and private practitioners on the job aids.

Each participant will orient a shopkeeper to the job aid.

Break into groups of 4-6 people, with one facilitator per group.

First give a few minutes to look over the job aid. Clarify if they have questions. Ask questions on dosage to check understanding. (10 mins.)

Clarify that they understand when they are supposed to educate. Discuss issues specific to attendants/mobile vendors (10 mins.)

Mock Encounters –Round 1 (70 mins.)

Facilitator should demonstrate how to educate a shopkeeper on the job aids, while the others watch. If possible, arrange for real 4-5 real shopkeepers to come in for this session. If this is not possible, one participant will pretend to be a shopkeeper. Then have each of the participants play the part of an educator, followed by feedback from the whole group. Give feedback on technical information and interpersonal skills. Have the participants also sign agreement forms and suggest locations for the job aids. (70 mins.)

3:45-4:00 Tea Break

4:00-4:30 Mock Encounters –Round 2 (30 mins.)

Continue the role plays. If all participants have had a chance to role play, facilitators should have weaker participants try again in order to correct mistakes.

4:30-4:50 Quiz (20 mins.)

Administer a 10-question quiz to participants on malaria (see Appendix J for an example). Have participants pass their quiz to the neighbor on left for scoring. Clarify any issues.

4:50-5:15 Final Discussion; Questions and Answers (25 mins.)

This is an opportunity to have a final discussion on the vendor-to-vendor concept. Make sure that participants do not leave without having any questions answered. Remind them of the

importance of their participation. Also tell them that there will be awards to the vendors who communicate the guidelines the most widely and correctly. Advise them that there will be a mystery shopping evaluation, as well as monitoring visits in the next six months.

5:15-5:30 Distribution of Materials and Certificates (15 mins.)

Distribute: Job aids (20 of each job aid per participant) and agreement booklets. Each job aid should be numbered. The facilitators should record who gets which job aids (e.g, Job aids 501-520, Thomas Sembo, Bungoma Mobile Vendor) for monitoring purposes.

Note: If anyone feels that they can distribute more than 20 job aids, give them as many as they think they can distribute (maximum of 40). They can get more from the District Health Office.

Also distribute: Certificate of Completion of Training, caps, t-shirts (if available)

5:30 Close

Thank the participants for coming and encourage them to communicate the guidelines. Have appropriate send-off.

APPENDIX G

Vendor-to-Vendor Training of Counter Attendants and Mobile Vendors Participant Hand-Out Bungoma District, Kenya

“Tibu Malaria Sawasawa”

Purpose

Malaria is a serious health issue in Bungoma District. However, when properly treated a person with Malaria is quickly cured. As part of a District initiative to prevent and control malaria, we want all people to get effective treatment for Malaria whether they go to a health center, a shop or a private practitioner.

The District Health Management Team has developed a way to teach shopkeepers and other private practitioners how to treat Malaria properly. We have named the strategy “Vendor to Vendor: Malaria Drug Education Project” because you, a wholesale vendor, sell drugs to retail vendors.

Our goal is that when you sell anti-malarial drugs to shops, kiosks, chemists and private practitioners, you will also educate them about the treatment information you learned here today.

Why Involve the Private Sector?

We have chosen to involve you in this activity, because you already interact with the shopkeepers, chemists and private practitioners. There are so many shops and private practitioners in this district that it would be very difficult for health workers to reach them all and it would be difficult to bring them all together for a training.

Responsibilities of Wholesale Attendants

1. When a shopkeeper comes to buy malaria drugs, explain which drugs are the most effective for malaria and are recommended by the Ministry of Health.
2. Explain to the shopkeeper or private practitioner that SP can now be sold without a prescription at a shop.
3. Give the shopkeeper or private practitioner a job aid, explain the meaning of each section, and tell them to hang it in the shop where they can easily use it when someone wants to buy a malaria drug. (*Note: if they have already received a job aid, do not give them another one.*)
4. Ask the shopkeeper or private practitioner to sign his or her name on the front of job aid.
5. Ask the shopkeeper or private practitioner to explain the job aid back to you so that you know that they understood it.

-
6. Give these key messages:
 - SP is not too strong for young children
 - Panadol should always be given with SP, even if the child is not feverish
 - If you treat malaria right the first time you will save money later
 7. Tell the shopkeeper or private practitioner to hang the job aid where they can easily see it when serving clients.
 8. Give the shopkeeper a client job aid poster to hang at the shop where clients can see it. They should also sign the front of this job aid.
 9. Ask the shopkeeper or private practitioner to sign an agreement saying that they received the job aids and will follow the new guidelines. Sign the agreement yourself. Give one copy to the shopkeeper or private practitioner; keep the other copy. Keep the agreements and a DHMT member will pick them up.
 10. When the shopkeeper or private practitioner returns, ask them if they have any questions about the malaria treatment guidelines or about the job aid.

Why you should participate in this activity

- You will be supplying shops and private practitioners with the most effective malaria drug.
- By selling the most effective drug you will get positive feedback from your customers and you will have a good reputation in the community.
- The continued selling of an ineffective drug could hurt your reputation or the reputation of the business you work for.
- You will assist the community to fight malaria.
- **You will help save lives**, especially of babies and children under 5 years.

How we will monitor the activity

After you have had the opportunity to orient shopkeepers and private practitioners with the Job Aid, their performance will be evaluated using Mystery Shoppers. Mystery Shoppers are people who will pose as customers. They will enter a shop or chemist and say that they have a child at home with malaria. After the Mystery Shopper visits the shop or chemist he or she will make note of what drug shopkeeper/private practitioner sold and in what dosage. The Mystery Shopper will check to see if the Job Aid is present and if the shopkeeper/chemist used it.

GENERAL INFORMATION ON MALARIA

Status of Malaria Worldwide and in Sub-Saharan Africa

- Each year there are more than 300 million cases of malaria worldwide
- Malaria kills more than 1 million people each year worldwide
- 3,000 people die from malaria each day worldwide
- Malaria is responsible for one out of every four childhood deaths in Africa
- Children often die of malaria within 48 hours of the first symptom
- The economic costs of malaria are estimated at US\$2 billion a year, or about [put in local currency]

Status of Malaria in Kenya and Bungoma District

Kenya

- Approximately 26,000 Kenyan children die each year from malaria. This is equal to an average of 72 children per day.
- Malaria causes disability among adults which significantly affects the nation's economy.

Bungoma District

- Malaria is transmitted year round.
- Nearly half of the people admitted to the hospital have malaria.
- 1 in 3 hospital deaths is due to malaria.

What is Malaria?

Malaria is a disease caused by the blood parasite *plasmodium*. The disease is transmitted when an anopheles mosquito carrying malaria parasites bites a person.

Current National Malaria Treatment Guidelines

The Ministry of Health has stated that an approved SP drug—namely, **Fansidar, Metakelfin, Orodor, Laridox, and Falcidin**—is the recommended first-line drug at all levels of the health care system, including home treatment. These drugs were previously only available at pharmacies but now can be sold by shops. The new drug is easier to take because only one dose is necessary.

The change was made because malaria had become resistant to chloroquine (CQ). That is, people who took CQ were not getting cured of their malaria. In Bungoma district, if 100 people take CQ, less than 15 will be cured of their malaria.

****SP does not reduce fever so it should always be taken with Panadol**

See the dosage chart on the Shopkeeper Job Aid

Inter-Personal Communication Skills

The following are some tips for effective communication when you orient the shopkeeper to the job aid:

- Use words that the shopkeeper will understand
- Emphasize the importance of using SP as first-line drug, even for young children
- Make eye contact
- Allow the shopkeeper to ask questions
- Ask the shopkeeper to repeat main concepts
- Be friendly and helpful

APPENDIX H

Checklist for Attendants to Communicate Malaria Treatment Guidelines

1. When a shopkeeper comes in to buy malaria drugs, explain that **SP (such as Fansidar, Orodar, Laridox, Falcidin)** is the most effective drug for malaria and is recommended by the Ministry of Health. Tell them CQ (chloroquine) is no longer available over the counter.
2. Explain to the shopkeeper or private practitioner that SP can now be sold without a prescription. (Can be sold at the shop.) Show approval if necessary.
3. Give the shopkeeper or private practitioner a job aid, explain how to use each section and tell him/her to hang it in the shop where he/she can easily use it when someone wants to buy a malaria drug.
a. Note: if they have already received a job aid from another source, do not give them another one.
4. Ask the shopkeeper to sign his name to the front of job aid.
5. Ask the shopkeeper or private practitioner to explain the job aid back to you so that you know that he has understood it.
6. Give these key messages:
 - SP is not too strong for young children
 - Panadol should always be given with SP, even if the child is not feverish
 - If you treat malaria right the first time you will save money later
7. Tell the shopkeeper or private practitioner to hang the job aid where he can easily see it when serving clients.
8. For shopkeeper only: Give the shopkeeper a poster to hang at the shop where clients can see it.
9. Ask the shopkeeper or private practitioner to sign a receipt saying that he/she has received the job aid. Sign the receipt yourself. Give one copy to the shopkeeper or private practitioner; keep the other copy. Keep the receipts and a DHMT member will pick them up.
10. When the shopkeeper or private practitioner returns, ask them if they have any questions about the malaria treatment guidelines or about the job aid.

APPENDIX I

Checklist for Mobile Vendors to Communicate Malaria Treatment Guidelines

1. The next time you sell malaria drugs to a shopkeeper, explain that **SP (such as Fansidar, Metakelfin, Orodar, Laridox, Falcidin)** is the most effective drug for malaria and is recommended by the Ministry of Health. Tell them CQ (chloroquine) is no longer available over the counter.
2. Explain to the shopkeeper that SP can now be sold by shops (can be sold without a prescription).
3. Give the shopkeeper a job aid, explain how to use each section. Tell them to hang it in the shop where they can easily use it when someone wants to buy a malaria drug. *(Note: if they have already received a job aid from another source, do not give them another one.)*
4. Ask the shopkeeper to explain the job aid back to you so that you know that he has understood it.
5. Give these key messages:
 - SP is not too strong for young children
 - Panadol should always be given with SP, even if the child is not feverish
 - If you treat malaria right the first time you will save money later
6. Help the shopkeeper find a place to hang the shopkeeper job aid. It should be placed where they can use it when helping clients. Have shopkeeper sign the front of the job aid.
7. Help the shopkeeper to hang the client job aid where clients can see it. Have shopkeeper sign the front of the job aid.
8. Ask the shopkeeper to sign an agreement saying that he/she has received the Job Aid. Sign the receipt yourself. Give one copy to the shopkeeper; keep the other copy and then return the forms (receipts) to your supplier.
9. The next time you visit the shopkeeper, ask them if they have any questions about the malaria treatment guidelines or about the job aids. If their job aids have gotten lost or stolen, issue them replacements.

APPENDIX J

Quiz for Monitoring Trained Mobile Vendors and Counter Attendants

a. Which of these is the main symptom of malaria?	<input type="checkbox"/> Fever [1]	<input type="checkbox"/> Stomachache [0]
b. Chloroquin is still more effective than Fansidar.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]
c. Fansidar is too strong for children under one year.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]
d. Fansidar should not be taken with Panadol.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]
e. Fansidar is to be taken as a single dose.	<input type="checkbox"/> True [1]	<input type="checkbox"/> False [0]
f. SP drugs such as Fansidar can now be sold at shops.	<input type="checkbox"/> True [1]	<input type="checkbox"/> False [0]
g. When a child has malaria you should continue feeding and give more fluids.	<input type="checkbox"/> True [1]	<input type="checkbox"/> False [0]
h. If a child does not improve, you should sell the mother another drug.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]
i. You should always sell the mother the anti-malarial she wants.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]
j. If a mother doesn't have enough money, the shopkeeper should sell smaller doses of the drug.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]

Note to monitor: Shaded areas indicate the correct answer.

APPENDIX K

Evaluation of Activity: Mystery Shopper Recording Form

Date _____

Name of Shopper _____

Scenario (*tick*) [] 1 asks for advice [] 2 asks for drug

Market _____

Name of shop or clinic _____

Questionnaire # _____

Data enterer _____
(signature)

Team Match Code _____

Division _____

Shopper received drugs noted? Yes No

Supervisor signature _____

1. For private clinics or nursing homes only: (circle)

A. Did the provider ask to see the child?	Yes	No
B. Did the provider refuse to sell you drugs unless you brought the child?	Yes	No [If yes, STOP HERE]
C. Was there a consultation fee? <i>If yes, how much did you pay?</i> Sh. _____	Yes	No
D. Did the provider give you a written prescription for buying drugs elsewhere? <i>If yes, record prescription here (as written);</i>	Yes	No

2. Did the shopkeeper [or provider] ask any of these questions about your child? (circle)

A. Child's age	Yes	No
B. Child's symptoms	Yes	No
C. How long child has been sick	Yes	No
D. Other _____	Yes	No

3. Did shopkeeper [or provider] give you any advice on: (circle)

A. What to do if child became sicker or did not get better <i>If yes, what?</i>	Yes	No
B. How to feed child during illness <i>If yes, how?</i>	Yes	No
C. What to do with any left-over drugs (such as fansidar)? <i>If yes, what?</i>	Yes	No

4. Did the shopkeeper [or provider] recommend any drug(s) to you? Yes No

5. In box below for all drugs recommended or purchased. (Use one column for each drug.)

Name of drug:	5.1	5.2	5.3	5.4
A. Reason(s) given for buying the drug	None	None	None	None
B. More effective	Yes No	Yes No	Yes No	Yes No
C. Is not bitter	Yes No	Yes No	Yes No	Yes No
D. Only take once	Yes No	Yes No	Yes No	Yes No
E. MOH recommends	Yes No	Yes No	Yes No	Yes No
F. Reduces fever	Yes No	Yes No	Yes No	Yes No
G. CQ resistance	Yes No	Yes No	Yes No	Yes No
H. Cheaper	Yes No	Yes No	Yes No	Yes No
I. Other	Yes No	Yes No	Yes No	Yes No
J. Were you <u>told</u> the full dose for the child? (If yes, put dose here)	Yes No	Yes No	Yes No	Yes No
K. Was the dose <u>written</u> down? (If yes, write dose here)	Yes No	Yes No	Yes No	Yes No
L. Were you told how many <u>days</u> to take it? (If yes, write days here)	Yes No _____ days	Yes No _____ days	Yes No _____ days	Yes No _____ days
M. Were you told to take with another drug?	Yes No	Yes No	Yes No	Yes No
N. How <u>many</u> did you buy? (If none, put 0.)				
O. What did you pay?	Sh.	Sh.	Sh.	Sh.

6. For scenario 2 only: When you stated that you did not have much money, what happened? (circle)

A. Shopkeeper suggested you buy a smaller dose	Yes No
B. Shopkeeper suggested you buy a cheaper drug (If yes, record drug suggested here.)	Yes No
C. Shopkeeper suggested you take child to health centre or hospital	Yes No
D. Shopkeeper offered you a discount	Yes No
E. Shopkeeper suggested you go to another shop or pharmacy/chemist	Yes No

APPENDIX L

Evaluation of Activity: Supervisor Recording Form

Date _____

Name of Supervisor _____

Division _____

Market _____

Name of shop or clinic _____

Name of owner _____

Sub-location _____

Questionnaire # _____

Data enterer _____
(signature)

Type of outlet: (tick)
1 ☐ Shop/kiosk
2 ☐ Pharmacy/Chemist
3 ☐ Private clinic/Nursing home
4 ☐ Other _____

Team Match Code _____

Receipt received: Yes [1] No [0]

No. of shop _____

Hello. I am a representative of the District Health Management Team. I would like to ask you a few questions about malaria treatment, if that is all right with you. Thank you for your time.

1. **Are you the:** Owner [1] Employee [2] Family member [3] Other [4] _____

2. **Gender of respondent:** Male [1] Female [2]

3. **What level of education have you completed?** (circle)

None – Std. 4 [1] Std. 5 – 8 [2] Form 1 – 4 [3] above Form 4 [4]

4. **Yesterday or the last working day, to about how many people did you sell drugs for malaria?** _____

5. **Of these, for about how many children under five years did you sell drugs for malaria?** _____

6. **Where do you purchase the anti-malarials you sell?** (Tick all that apply; enter name & location)

1 ☐ Wholesale pharmacy/chemist _____

2 ☐ Wholesale general shop _____

3 ☐ Mobile drug vendor _____

4 ☐ Pharmaceutical company _____

5 ☐ Other _____

6 ☐ Don't know _____

7. **Which anti-malarial drug is the most preferred for children under five?** _____

8. **Which anti-malarial drug is the most preferred for adults?** _____

9. Which anti-malarials do you currently have in stock? (tick all mentioned)

9.1 CQs	9.2 SPs	9.3 AQs	9.4 Others
A <input type="checkbox"/> Bioquin	A <input type="checkbox"/> Amalar	A <input type="checkbox"/> Amobin	A <input type="checkbox"/> Artenum
B <input type="checkbox"/> Chloroquin	B <input type="checkbox"/> Beffin	B <input type="checkbox"/> Amodiaquin	B <input type="checkbox"/> Cotecxin
C <input type="checkbox"/> Dawaquin	C <input type="checkbox"/> Falcidin	C <input type="checkbox"/> Betaquin	C <input type="checkbox"/> Halfan
D <input type="checkbox"/> Dawaquin Jr.	D <input type="checkbox"/> Fanlar	D <input type="checkbox"/> Camoquin	D <input type="checkbox"/> Halofantrin
E <input type="checkbox"/> Homaquin	E <input type="checkbox"/> Fansidar	E <input type="checkbox"/> Malaratab	E <input type="checkbox"/> Lariam
F <input type="checkbox"/> Laraquin	F <input type="checkbox"/> Laridox	F <input type="checkbox"/> Other:	F <input type="checkbox"/> Mephaquin
G <input type="checkbox"/> Lavaquin	G <input type="checkbox"/> Maladar		G <input type="checkbox"/> Primaquin
H <input type="checkbox"/> Malaraquin	H <input type="checkbox"/> Metfin		H <input type="checkbox"/> Quinine
I <input type="checkbox"/> Rohoquin	I <input type="checkbox"/> Metakelfin		I <input type="checkbox"/> Other:
J <input type="checkbox"/> Other:	J <input type="checkbox"/> Methomine		
	K <input type="checkbox"/> Orodar		
	L <input type="checkbox"/> Pylarafin		
	M <input type="checkbox"/> Viparum		
	N <input type="checkbox"/> Other:		

10. In shops and kiosks only, of the chloroquine drugs you have, how much is in stock?

Drug Name (& letter)	Amount	Drug Name (& letter)	Amount
10.1	1 <input type="checkbox"/> Few <20 tabs. 2 <input type="checkbox"/> Some 20-100 tabs. 3 <input type="checkbox"/> Many > 100 tabs.	10.4	1 <input type="checkbox"/> Few <20 tabs. 2 <input type="checkbox"/> Some 20-100 tabs. 3 <input type="checkbox"/> Many > 100 tabs.
10.2	1 <input type="checkbox"/> Few <20 tabs. 2 <input type="checkbox"/> Some 20-100 tabs. 3 <input type="checkbox"/> Many > 100 tabs.	10.5	1 <input type="checkbox"/> Few <20 tabs. 2 <input type="checkbox"/> Some 20-100 tabs. 3 <input type="checkbox"/> Many > 100 tabs.
10.3	1 <input type="checkbox"/> Few <20 tabs. 2 <input type="checkbox"/> Some 20-100 tabs. 3 <input type="checkbox"/> Many > 100 tabs.	10.6	1 <input type="checkbox"/> Few <20 tabs. 2 <input type="checkbox"/> Some 20-100 tabs. 3 <input type="checkbox"/> Many > 100 tabs.

11. Now I am going to ask you questions about dosages & prices of specific drugs that you sell:
(only ask for those ticked above in question 10)

	Fansidar		Falcidin		Laridox		Metakelfin		Orodar	
	Dose	Price of dose	Dose	Price of dose	Dose	Price of dose	Dose	Price of dose	Dose	Price of dose
Adult		Sh.		Sh.		Sh.		Sh.		Sh.
Child (18 months)		Sh.		Sh.		Sh.		Sh.		Sh.
Amount in stock (tablets)	1 <input type="checkbox"/> Few<20 tab 2 <input type="checkbox"/> Som 20-100 3 <input type="checkbox"/> Many >100		1 <input type="checkbox"/> Few<20 tab 2 <input type="checkbox"/> Som 20-100 3 <input type="checkbox"/> Many >100		1 <input type="checkbox"/> Few<20 tab 2 <input type="checkbox"/> Som 20-100 3 <input type="checkbox"/> Many >100		1 <input type="checkbox"/> Few<20 tab 2 <input type="checkbox"/> Som 20-100 3 <input type="checkbox"/> Many >100		1 <input type="checkbox"/> Few<20 tab 2 <input type="checkbox"/> Som 20-100 3 <input type="checkbox"/> Many >100	
Any expired drugs? [Shops only]	Yes [1] No[0]		Yes [1] No[0]		Yes [1] No[0]		Yes [1] No[0]		Yes [1] No[0]	

12. Did shopkeeper refer to job aid to answer these questions? Yes [1] No [0] No job aid visible [3]

13. Now I am going to ask you a few questions about some posters we produced.

A. Did you ever receive these posters? (circle) Yes [1] No [0] (IF "No" GO TO Q. 21)

B. About when did you get the posters? _____ (month/year)

C. From whom did you get the posters? (tick)

1 ☐ Wholesale chemist/shop

2 ☐ Mobile vendor

3 ☐ Other _____

	A. Shopkeeper Job Aid	B. Client Job Aid
14. Where are the posters displayed?	1 <input type="checkbox"/> On wall 2 <input type="checkbox"/> On shelves 3 <input type="checkbox"/> On counter 4 <input type="checkbox"/> Not displayed 5 <input type="checkbox"/> Other _____	1 <input type="checkbox"/> Outside drug outlet 2 <input type="checkbox"/> On door 3 <input type="checkbox"/> Inside wall of drug outlet 4 <input type="checkbox"/> Not displayed 5 <input type="checkbox"/> Other _____
15. If not displayed, why not?	1 <input type="checkbox"/> Taken away 2 <input type="checkbox"/> Fell down/ blew away 3 <input type="checkbox"/> Is at home 4 <input type="checkbox"/> Other _____	1 <input type="checkbox"/> Taken away 2 <input type="checkbox"/> Fell down/ blew away 3 <input type="checkbox"/> Is at home 4 <input type="checkbox"/> Other _____
16. Observe location	1 <input type="checkbox"/> Easily visible by shopkeeper 2 <input type="checkbox"/> Not easily visible 3 <input type="checkbox"/> Missing	1 <input type="checkbox"/> Easily visible by customer 2 <input type="checkbox"/> Not easily visible 3 <input type="checkbox"/> Missing
17. Observe condition	1 <input type="checkbox"/> Good 2 <input type="checkbox"/> Worn or torn, but usable 3 <input type="checkbox"/> Unusable 4 <input type="checkbox"/> Missing	1 <input type="checkbox"/> Good 2 <input type="checkbox"/> Worn or torn, but usable 3 <input type="checkbox"/> Unusable 4 <input type="checkbox"/> Missing
18. Would you say that the poster was:	1 <input type="checkbox"/> Used a lot by shopkeeper 2 <input type="checkbox"/> Used sometimes 3 <input type="checkbox"/> Not used very much	1 <input type="checkbox"/> Used a lot by clients 2 <input type="checkbox"/> Used sometimes by clients 3 <input type="checkbox"/> Not used very much

19. Some people have had problems arising from using the shopkeeper poster.
What problems, if any, have you had? (Tick all said)

1 <input type="checkbox"/> People don't pay back credit	2 <input type="checkbox"/> People want cheaper drugs than those on the poster
3 <input type="checkbox"/> Poster doesn't list most popular drugs	4 <input type="checkbox"/> Drugs on poster are illegal in shops
5 <input type="checkbox"/> Drugs not easily available	6 <input type="checkbox"/> People don't want to buy pain-killer plus antimalarial
7 <input type="checkbox"/> Other	

20. For those who have poster but no SPs in stock: Why aren't you stocking SPs? (Tick all said)

1 <input type="checkbox"/> Illegal in shops	2 <input type="checkbox"/> Too expensive	3 <input type="checkbox"/> Slow-moving
4 <input type="checkbox"/> Not easily available	5 <input type="checkbox"/> Not very effective	6 <input type="checkbox"/> Too strong
7 <input type="checkbox"/> Other		

21. To end this interview, I would like to ask you ten questions on malaria. Please answer them as well as you can. (Tick the response given.)

a. Which of these is the main symptom of malaria?	<input type="checkbox"/> Fever [1]	<input type="checkbox"/> Stomachache [0]
b. Chloroquin is still more effective than Fansidar.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]
c. Fansidar is too strong for children under one year.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]
d. Fansidar should not be taken with Panadol.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]
e. Fansidar is to be taken as a single dose.	<input type="checkbox"/> True [1]	<input type="checkbox"/> False [0]
f. SP drugs such as Fansidar can now be sold at shops.	<input type="checkbox"/> True [1]	<input type="checkbox"/> False [0]
g. When a child has malaria you should continue feeding and give more fluids.	<input type="checkbox"/> True [1]	<input type="checkbox"/> False [0]
h. If a child does not improve, you should sell the mother another drug.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]
i. You should always sell the mother the anti-malarial she wants.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]
j. If a mother doesn't have enough money, the shopkeeper should sell smaller doses of the drug.	<input type="checkbox"/> True [0]	<input type="checkbox"/> False [1]

22. Do you have any final comments on malaria treatment in this district?

Remember to give feedback on the quiz!

Comments of supervisor (optional):
